

# WEST Search History

DATE: Wednesday, September 04, 2002

## Set Name Query side by side

## Hit Count Set Name result set

*DB=USPT,PGPB; PLUR=NO; OP=ADJ*

L9	toner\$1 same L8	12	L9
L8	l1 same (phthalocyanine\$1 or titanylphthalocyanine\$1 or vanadylphthalocyanine\$1)	24	L8
L7	toner\$ same ((calix near4 arene\$1) or calixarene\$1 or calix\$3arene\$1) and (flash near3 fix\$6)	2	L7

*DB=JPAB,EPAB,DWPI,TDBD; PLUR=NO; OP=ADJ*

L6	toner\$ and ((calix near4 arene\$1) or calixarene\$1 or calix\$3arene\$1) and (flash near3 fix\$6)	1	L6
L5	toner\$ and ((calix near4 arene\$1) or calixarene\$1 or calix\$3arene\$1) and (ir or infrared or (infra near2 red))	1	L5

*DB=USPT,PGPB; PLUR=NO; OP=ADJ*

L4	toner\$ and L3	26	L4
L3	l1 and L2	120	L3
L2	ir or infrared or (infra near2 red)	208561	L2
L1	(calix near4 arene\$1) or calixarene\$1 or calix\$3arene\$1	458	L1

END OF SEARCH HISTORY

# STN Columbus

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 NEWS 2 Apr 08 "Ask CAS" for self-help around the clock  
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 NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available  
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 NEWS 10 Jun 10 MEDLINE Reload  
 NEWS 11 Jun 10 PCTFULL has been reloaded  
 NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment  
 NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;  
 saved answer sets no longer valid  
 NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY  
 NEWS 15 Jul 30 NETFIRST to be removed from STN  
 NEWS 16 Aug 08 CANCERLIT reload  
 NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN  
 NEWS 18 Aug 08 NTIS has been reloaded and enhanced  
 NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
 now available on STN  
 NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded  
 NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded  
 NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced  
 NEWS 23 Sep 03 JAPIO has been reloaded and enhanced

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,  
 CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
 AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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FILE 'HOME' ENTERED AT 07:15:44 ON 04 SEP 2002

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

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FILE 'CAPLUS' ENTERED AT 07:16:05 ON 04 SEP 2002  
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FILE COVERS 1907 - 4 Sep 2002 VOL 137 ISS 10  
FILE LAST UPDATED: 3 Sep 2002 (20020903/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> s (calixarene# or (calix (a)arene#))
      4008 CALIXARENE#
      3505 CALIX
      16894 ARENE#
      102 CALIX (A)ARENE#
L1      4050 (CALIXARENE# OR (CALIX (A)ARENE#))
```

```
=> s (ir or infrared) and l1 and toner#
      489072 IR
      206280 INFRARED
      28020 TONER#
L2      1 (IR OR INFRARED) AND L1 AND TONER#
```

```
=> d kwic
```

```
L2  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2002 ACS
TI  Electrophotographic color toners containing quaternary ammonium
    IR-absorber and calix arene for IR-flash fixing, method for flash
    fixing image made of same, and apparatus for image formation using same
AB  The title toner contains a colorant, a binder resin, a
    charge-controlling agent, and an IR-absorber for flash-fixing, wherein
    the charge-controlling agent is calix arene. The toner shows little
    deterioration of the quaternary ammonium IR-absorber caused by the
    charge-controlling agent.
ST  electrophotog color toner IR absorber calix arene flash fixing
IT  Electrophotographic apparatus
    Electrophotographic toners
      (electrophotog. color toners for flash fixing, method for
      flash fixing using same, and app. for image formation using same)
IT  Photographic fixing
      (electrophotog.; electrophotog. color toners for flash
      fixing, method for flash fixing using same, and app. for image
      formation using same)
IT  Electrophotographic development
      (fixing; electrophotog. color toners for flash fixing, method
```

# STN Columbus

for flash fixing using same, and app. for image formation using same)  
 IT Quaternary ammonium compounds, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polymethine; IR-absorber in electrophotog. toners)  
 IT 4182-80-3, NIR-AM 1 331229-95-9, NIR-IM 1  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (IR-absorber in electrophotog. toners)  
 IT 152165-59-8, Bontron E 89  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (charge-controlling agent in electrophotog. toners)

=> d bib

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

## Full Text

AN 2002:265374 CAPLUS  
 DN 136:316855  
 TI Electrophotographic color toners containing quaternary ammonium  
 IR-absorber and calix arene for IR-flash fixing, method for flash  
 fixing image made of same, and apparatus for image formation using same  
 IN Fukuda, Makoto  
 PA Fujitsu Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002108023	A2	20020410	JP 2000-295079	20000927
OS	MARPAT 136:316855				

=> d his

(FILE 'HOME' ENTERED AT 07:15:44 ON 04 SEP 2002)

FILE 'CAPLUS' ENTERED AT 07:16:05 ON 04 SEP 2002

L1 4050 S (CALIXARENE# OR (CALIX (A)ARENE#).)  
 L2 1 S (IR OR INFRARED) AND L1 AND TONER#

=> s l1 and (phthalocyanine# or cyanine# or aminium# or diimonium# or anthraquinone# or polyme  
 28868 PHTHALOCYANINE#  
 12945 CYANINE#  
 693 AMINIUM#  
 35 DIIMONIUM#  
 28940 ANTHRAQUINONE#  
 2571 POLYMETHINE#  
 31222 YTTERBIUM  
 L3 49 L1 AND (PHTHALOCYANINE# OR CYANINE# OR AMINIUM# OR DIIMONIUM#  
 OR ANTHRAQUINONE# OR POLYMETHINE# OR YTTERBIUM)

=> s l3 and toner#  
 28020 TONER#  
 L4 2 L3 AND TONER#

=> d kwic 1-2

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

TI Electrophotographic color toners containing quaternary ammonium  
 IR-absorber and calix arene for IR-flash fixing, method for flash

## STN Columbus

fixing image made of same, and apparatus for image formation using same

AB The title **toner** contains a colorant, a binder resin, a charge-controlling agent, and an IR-absorber for flash-fixing, wherein the charge-controlling agent is **calix arene**. The **toner** shows little deterioration of the quaternary ammonium IR-absorber caused by the charge-controlling agent.

ST electrophotog color **toner** IR absorber **calix arene** flash fixing

IT Electrophotographic apparatus  
Electrophotographic **toners**  
(electrophotog. color **toners** for flash fixing, method for flash fixing using same, and app. for image formation using same)

IT Photographic fixing  
(electrophotog.; electrophotog. color **toners** for flash fixing, method for flash fixing using same, and app. for image formation using same)

IT Electrophotographic development  
(fixing; electrophotog. color **toners** for flash fixing, method for flash fixing using same, and app. for image formation using same)

IT Quaternary ammonium compounds, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**polymethine**; IR-absorber in electrophotog. **toners**)

IT 4182-80-3, NIR-AM 1 331229-95-9, NIR-IM 1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(IR-absorber in electrophotog. **toners**)

IT 152165-59-8, Bontron E 89  
RL: TEM (Technical or engineered material use); USES (Uses)  
(charge-controlling agent in electrophotog. **toners**)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ST water thinned jet printing ink amphipathic compd; light water resistance jet printing ink cyclodextrin; clathrate steroid **calixarene** jet printing ink

IT Metacyclophanes  
RL: MOA (Modifier or additive use); USES (Uses)  
(**calixarenes**; water-thinned anticlogging jet-printing inks contg. amphipathic clathrate compds. with good water and light resistances and storage stability)

IT 980-26-7, **Toner** Magenta E 02 172308-31-5, **Cyanine** Blue KRO  
RL: TEM (Technical or engineered material use); USES (Uses)  
(pigment; water-thinned anticlogging jet-printing inks contg. amphipathic clathrate compds. with good water and light resistances and storage stability)

=> d bib

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

Full Text

AN 2002:265374 CAPLUS

DN 136:316855

TI Electrophotographic color **toners** containing quaternary ammonium IR-absorber and **calix arene** for IR-flash fixing, method for flash fixing image made of same, and apparatus for image formation using same

IN Fukuda, Makoto

PA Fujitsu Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

# STN Columbus

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PI  JP 2002108023      A2   20020410      JP 2000-295079      20000927
OS  MARPAT 136:316855

```

=> d his

(FILE 'HOME' ENTERED AT 07:15:44 ON 04 SEP 2002)

```

FILE 'CAPLUS' ENTERED AT 07:16:05 ON 04 SEP 2002
L1      4050 S (CALIXARENE# OR (CALIX (A)ARENE#))
L2      1 S (IR OR INFRARED) AND L1 AND TONER#
L3      49 S L1 AND (PHthalOCYANINE# OR CYANINE# OR AMINIUM# OR DIIMONIUM#
L4      2 S L3 AND TONER#

```

```

=> s l1 and (carbon or c) (w) black#
      901287 CARBON
      2932077 C
      207074 BLACK#
      73095 (CARBON OR C) (W) BLACK#
L5      8 L1 AND (CARBON OR C) (W) BLACK#

```

=> l5 and toner#  
L5 IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

```

=> s l5 and toner#
      28020 TONER#
L6      5 L5 AND TONER#

```

=> d bib kwic 1-5

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS

## Full Text

```

AN  2002:61871  CAPLUS
DN  136:126485
TI  Electrophotographic toner and environmentally friendly charge
controlling agent showing excellent charging properties
IN  Yushina, Heihachi; Yamanaka, Shunichiro
PA  Orient Chemical Industries, Ltd., Japan
SO  Jpn. Kokai Tokkyo Koho, 10 pp.
    CODEN: JKXXAF
DT  Patent
LA  Japanese
FAN.CNT 1

```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2002023427	A2	20020123	JP 2000-211638	20000712
TI	Electrophotographic <b>toner</b> and environmentally friendly charge controlling agent showing excellent charging properties				
AB	The invention relates to an electrophotog. <b>toner</b> comprised of a styrenic resin binder, a colorant, and a charge controlling agent, wherein the charge controlling agent is <b>calixarene</b> partially coated with polyester. The styrenic resin has a specified mol. wt. distribution. The polyester has an acid value of ≥15. The charge controlling agent contains a specific polyolefin wax. The <b>toner</b> shows excellent charging characteristics. .				
ST	electrophotog <b>toner</b> charge controlling agent polyester coated <b>calixarene</b>				
IT	Polyesters, uses				
RL:	TEM (Technical or engineered material use); USES (Uses)				

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(coating for **calixarene**; electrophotog. **toner** and environmentally friendly **calixarene** charge controlling agent showing excellent charging properties)

IT **Carbon black**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (colorant, MA100; electrophotog. **toner** and environmentally friendly **calixarene** charge controlling agent showing excellent charging properties)

IT **Electrophotographic toners**  
 (electrophotog. **toner** and environmentally friendly **calixarene** charge controlling agent showing excellent charging properties)

IT 25085-34-1, Acrylic acid-styrene copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (binder; electrophotog. **toner** and environmentally friendly **calixarene** charge controlling agent showing excellent charging properties)

IT 68971-82-4  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (**calixarene**; electrophotog. **toner** and environmentally friendly **calixarene** charge controlling agent showing excellent charging properties)

IT 9003-07-0, Polypropylene  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. **toner** and environmentally friendly **calixarene** charge controlling agent showing excellent charging properties)

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS  
Full Text  
 AN 2001:718133 CAPLUS  
 DN 135:274352  
 TI Water-thinned ink-jet recording fluids containing amphipathic compounds and their use  
 IN Inoue, Tomoko; Horiuchi, Takahiro; Wayaku, Kenjiro  
 PA Sharp Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001271012	A2	20011002	JP 2000-176711	20000613
PRAI	JP 2000-12167	A	20000120		

ST water thinned jet printing ink amphipathic compd; light water resistance jet printing ink cyclodextrin; clathrate steroid **calixarene** jet printing ink

IT Metacyclophanes  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**calixarenes**; water-thinned anticlogging jet-printing inks contg. amphipathic clathrate compds. with good water and light resistances and storage stability)

IT **Carbon black**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (pigment, M 800; water-thinned anticlogging jet-printing inks contg. amphipathic clathrate compds. with good water and light resistances and storage stability)

IT 980-26-7, **Toner** Magenta E 02 172308-31-5, Cyanine Blue KRO  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (pigment; water-thinned anticlogging jet-printing inks contg. amphipathic clathrate compds. with good water and light resistances and

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storage stability)

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS

Full Text

AN 1994:19221 CAPLUS

DN 120:19221

TI Electrophotographic **toners** containing charge-controlling resin and **calixarene** compound

IN Ueda, Hideaki

PA Minolta Camera Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05119535	A2	19930518	JP 1991-277525	19911024
TI	Electrophotographic <b>toners</b> containing charge-controlling resin and <b>calixarene</b> compound				
AB	The neg. charging <b>toners</b> contain a thermoplastic resin, a colorant, and 0.1-10 parts/100 parts thermoplastic resin of a charge-controlling resin prep'd. by copolymg. 1-20 wt.% of the total monomers of CH <sub>2</sub> :CR <sub>1</sub> [CONHCR <sub>2</sub> R <sub>3</sub> (CH <sub>2</sub> ) <sub>n</sub> SO <sub>3</sub> H] (R <sub>1</sub> = H, Me; R <sub>2</sub> -3 = H, C <sub>1</sub> -10 alkyl; n = 1-10) with ≥1 vinyl monomer(s) selected from styrene, (meth)acrylate esters, and 0.1-10 parts/100 parts thermoplastic resin of a <b>calixarene</b> comp'd. The <b>toners</b> show good charging properties and provide high-quality images without fog in high-speed process. Thus, a styrene-acrylic resin, MA 100 ( <b>carbon black</b> ), Viscol 660P (polypropylene) I, and styrene-2-acrylamide-2-methylpropanesulfonic acid copolymer were kneaded, pulverized, and mixed with SiO <sub>2</sub> to give a <b>toner</b> , which was mixed with a carrier to give a developer.				
ST	<b>toner</b> acrylamide copolymer electrophotog; sulfonic acid copolymer <b>toner</b> electrophotog; charge controlling agent <b>toner</b> electrophotog; <b>calixarene toner</b> electrophotog				
IT	Electrophotographic developers ( <b>toners</b> , contg. charge-controlling resins and <b>calixarene</b> compds.)				
IT	51121-85-8	61910-75-6	RL: USES (Uses) (charge-controlling resin, electrophotog. developer <b>toner</b> contg.)		

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS

Full Text

AN 1993:591915 CAPLUS

DN 119:191915

TI **Toners** for developing electrostatic image showing improved charge-controlling properties

IN Yasuno, Masahiro; Kobayashi, Makoto

PA Minolta Camera Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05127426	A2	19930525	JP 1991-315443	19911102
TI	<b>Toners</b> for developing electrostatic image showing improved charge-controlling properties				
AB	The title <b>toners</b> comprise thermoplastic core particles fixed or coated				



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by a **calixarene** and inorg. fine particles coated with an alkylpolysiloxane on the surface of core particles. The **toners** show good charge-controlling properties and stable charge. Thus, styrene-Bu methacrylate copolymer, MA 8 (**carbon black**), and Viscol 550P (polypropylene) were kneaded, pulverized, treated with I and P-25 (TiO<sub>2</sub>) coated with Me<sub>3</sub>SiO[SiHMeO]<sub>n</sub>SiMe<sub>3</sub>, and mixed with SiO<sub>2</sub> to give a **toner**.

ST **toner** charge controlling agent electrophotog; alkylsiloxane inorg particle **toner** electrophotog; **calixarene toner** electrophotog developer

IT Siloxanes and Silicones, uses  
 RL: USES (Uses)  
     (inorg. grains coated with, for electrophotog. developer **toner**)

IT Electrophotographic developers  
     (**toners**, charge-controlling agent-fixed grains as)

IT 68971-82-4 93503-77-6 131957-03-4 150335-49-2 150335-50-5  
 RL: USES (Uses)  
     (electrophotog. developer **toner** grain coated with, charge-controlling agent)

IT 7631-86-9, Aerosil OX 50, uses 13463-67-7, Aerosil P 25, uses  
 RL: USES (Uses)  
     (siloxane-treated, electrophotog. developer **toner** grains coated with)

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS  
Full Text

AN 1993:202055 CAPLUS  
 DN 118:202055

TI Electrophotographic image formation using **toner** containing **calixarene** derivative as charge-controlling agent

IN Kuramoto, Shinichi; Orihara, Motoi; Hagiwara, Tomoe  
 PA Ricoh Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04295862	A2	19921020	JP 1991-84823	19910325
	JP 3073782	B2	20000807		

TI Electrophotographic image formation using **toner** containing **calixarene** derivative as charge-controlling agent

AB In an image-forming method using a single-component developer comprising a **toner** and additives which is supplied to a developer-carrying sleeve on which a lot of microfields are formed to develop latent images on a photoreceptor, a **toner** comprising a binder resin, a coloring agent, and a **calixarene** deriv. charge-controlling agent is used. The method is capable of forming ≥2 layers of the **toner** uniformly on the developer-carrying substance and **toner** filming phenomena are prevented. Thus, styrene-acrylic copolymer, polypropylene, **carbon black**, and I were kneaded, pulverized, and mixed with colloidal silica to give a **toner**, which gave clear images in continuously repeated copying.

ST charge controlling agent **toner** electrophotog; **calixarene toner** electrophotog developer

IT Electrophotographic developers  
     (single-component, charge-controlling agent for, **calixarene** deriv. as)

IT 147094-35-7 147094-36-8 147094-37-9  
 RL: USES (Uses)  
     (charge-controlling agent, electrophotog. **toner** contg.)

## STN Columbus

=> d his

(FILE 'HOME' ENTERED AT 07:15:44 ON 04 SEP 2002)

FILE 'CAPLUS' ENTERED AT 07:16:05 ON 04 SEP 2002

L1 4050 S (CALIXARENE# OR (CALIX (A)ARENE#))  
L2 1 S (IR OR INFRARED) AND L1 AND TONER#  
L3 49 S L1 AND (PHTHALOCYANINE# OR CYANINE# OR AMINIUM# OR DIIMONIUM#  
L4 2 S L3 AND TONER#  
L5 8 S L1 AND (CARBON OR C) (W) BLACK#  
L6 5 S L5 AND TONER#

=>